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FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			EXAMINER THOMPSON, JAMES A	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,847	Applicant(s) HART ET AL.	
	Examiner James A. Thompson	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/30/04, 12/27/04, 10/31/05, 1/24/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/27/04, 10/31/05, 1/24/06, 4/17/06, 10/2/06, 11/6/06, 2/2/07, 4/27/07, 7/20/07, 9/6/07, 10/26/07.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 3-4, 6, 12, 14, 29-32, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226).**

Regarding claim 1: Sugiyama discloses a system (figure 1 and column 2, lines 62-63 of Sugiyama) for printing time-based media (column 3, lines 11-16 of Sugiyama), the system comprising: a media processing system (figure 1(12-17,21-29) of Sugiyama) for generating an electronic representation (column 6, lines 19-26 of Sugiyama) of time-based media (column 3, lines 12-17 of Sugiyama), wherein the media processing system resides at least in part on a multi-media printer (figure 1 and column 3, lines 11-13 of Sugiyama – *resides wholly on multi-media (video) printer*); and that the multi-media printer includes a housing (the overall physical construction of the system of figure 1 of Sugiyama) for supporting an interface (figure 1(11) of Sugiyama) for transferring time-based media between an external system (video input device) and the printer (column 3, lines 11-20 of Sugiyama), and for supporting an electronic output system (figure 1(18-20) of Sugiyama) in communication with the media processing system to receive the electronic representation, the electronic output system producing a corresponding electronic output from the electronic representation of the time-based media (column 3, lines 31-41 of Sugiyama).

Sugiyama does not disclose expressly that the media processing system resides at least in part on an external media processing system; that said housing supports an interface for transferring said time-based media data between an external *media processing* system and the printer; and a resource allocation module for determining processing allocation for at least one task among the printer and the external media processing system.

Ishikawa discloses that the media processing system resides at least in part on an external media processing system (figure 1 and column 6, lines 45-52 of Ishikawa – *overall media processing system*

resides in multiple media processing systems, all connected by a network); and a resource allocation module (figure 1(9) of Ishikawa) for determining processing allocation for at least one task among the printer (figure 1(4') of Ishikawa) and the external media processing system (figure 1(15) of Ishikawa).

Sugiyama and Ishikawa are analogous art because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform the time-based media processing using processing distribution among multiple media processing systems, and including the resource allocation module taught by Ishikawa. The external system taught by Sugiyama would then be an external media processing system according to the combination of Sugiyama in view of Ishikawa since the external system in Ishikawa is specifically an external media processing system. The motivation for doing so would have been that distributed processing increases the overall speed with which media data can be processed (column 3, lines 40-48 of Ishikawa), and proper load balancing (*via* the resource allocation module) maximizes the efficiency of the distributed processing. Therefore, it would have been obvious to combine Ishikawa with Sugiyama to obtain the invention as specified in claim 1.

Regarding claim 3: Sugiyama discloses that the media processing system determines a printed representation of the time-based media (column 5, line 66 to column 6, line 5 of Sugiyama); and the system further comprises a printed output system (figure 1(31-33) of Sugiyama) in communication with the media processing system (column 5, line 63 to column 6, line 2 of Sugiyama) to receive the printed representation (column 5, line 66 to column 6, line 5 of Sugiyama), the printed output system producing a corresponding printed output from the printed representation of the time-based media (column 6, lines 2-5 of Sugiyama).

Further regarding claim 4: Ishikawa discloses that the external media processing system is a remote external service system coupled to the network, the external service system in communication with the media processing system for performing at least some processing steps for the time-based ("time-based" by combination with Sugiyama) media (column 6, lines 45-52 of Ishikawa).

Regarding claims 6 and 32: Sugiyama discloses that the interface (input source) comprises a communication interface (figure 1(11) of Sugiyama) allowing the system to be communicatively coupled to an electronic device, the electronic device providing the time-based media to the system (column 3, lines 11-17 of Sugiyama).

Regarding claims 12 and 38: Sugiyama discloses that the interface (input source) comprises embedded screen capture hardware (figure 1(12) and column 3, lines 12-16 and lines 20-24 of Sugiyama).

Regarding claims 14 and 40: Sugiyama discloses that the interface (input source) comprises an embedded video recorder (figure 1(11) of Sugiyama – *video signal input from video recorder directly connected to interface*), wherein the external source of media (figure 1(“Video Signal”) of Sugiyama) is a series of images captured by the embedded video recorder, converted into an electronic format (column 3, lines 12-17 of Sugiyama), and then provided to the media processing system (column 3, lines 16-20 of Sugiyama).

Regarding claim 29: Sugiyama discloses that the external media processing system includes a user interface that provides information to a user about at least one of the printed representation and the electronic representation of the time-based media (column 3, lines 45-48 of Sugiyama), the user interface further accepting input from a user to cause the media processing system to modify at least one of the printed representation and the electronic representation of the time-based media (column 3, lines 57-61 of Sugiyama).

Regarding claim 30: Sugiyama discloses the media processing system determines at least one of the printed representation and the electronic representation (column 4, lines 24-42 of Sugiyama).

Sugiyama does not disclose expressly that the determination is with assistance from an external media processing system that is an external computing device.

Ishikawa discloses determining at least one of a printed representation and an electronic representation with assistance from an external media processing system that is an external computing system (column 6, lines 33-44 of Ishikawa – *printed representation determined by several computing systems external to each other*).

Sugiyama and Ishikawa are analogous art because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to determine the printed representation with assistance from at least one external computing system, as taught by Ishikawa. The motivation for doing so would have been that distributed processing increases the overall speed with which media data can be processed (column 3, lines 40-48 of Ishikawa). Therefore, it would have been obvious to combine Ishikawa with Sugiyama to obtain the invention as specified in claim 30.

Regarding claim 31: Sugiyama discloses that the printer further comprises the following supported by its housing: an input source for receiving time-based media (figure 1(“VIDEO SIGNAL”) and column 3, lines 11-17 of Sugiyama); a first output source coupled to the input source (figure 1(30-33) of Sugiyama – *coupled to input source via System Controller (15)*), the first output source producing a printed representation of the time-based media (column 4, lines 35-42 of Sugiyama); a second output

source coupled to the input source (figure 1(18-19) of Sugiyama – *coupled to input source via System Controller (15) and Selector (17)*), the second output source producing an electronic representation of the time-based media (column 4, lines 24-35 of Sugiyama – *produces electronic signals used to drive display*), the electronic representation of the time-based media corresponding to the printed representation of the time-based media (column 4, lines 30-35 of Sugiyama).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Gropp (*Using MPI – Portable Parallel Programming with the Message-Passing Interface, second edition*).

Regarding claim 2: Sugiyama in view of Ishikawa does not disclose expressly that said resource allocation module determines whether said printer resource interacts as a master or as a slave with an external system.

Gropp discloses determining whether different processors interact as master or slave processors (page 35, last five lines).

Sugiyama in view of Ishikawa is analogous are with respect to Gropp because they are from similar problem solving areas, namely the control of resource allocation in distributed (parallel) processing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to control whether said printer resource, taught by Sugiyama in view of Ishikawa, interacts as a master or as a slave, as taught by Gropp, with said external system taught by Sugiyama in view of Ishikawa. The motivation for doing so would have been a master-slave algorithm is useful in cases where the processors require minimal communication with each other, such as during matrix-vector multiplication operations (page 35, first paragraph under section 3.6 heading) or during image processing. Therefore, it would have been obvious to combine Gropp with Sugiyama in view of Ishikawa to obtain the invention as specified in claim 2.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Chang (US Patent 6,167,033).

Further regarding claim 5: Ishikawa discloses that the external media processing system is an external device coupled to the printer network (figure 1 and column 6, lines 6-19 of Ishikawa).

Sugiyama in view of Ishikawa does not disclose expressly that the external media processing system is an external device coupled to the printer network *by the Internet*.

Chang discloses coupling external devices to a network by the Internet (column 1, lines 39-50 of Chang).

Sugiyama in view of Ishikawa is analogous art with respect to Chang since they are from similar problem solving areas, namely how to efficiently transmit digital image/video data between a plurality of different computational devices. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use the Internet to connect the external media processing system to the printer network. The suggestion for doing so would have been that the Internet is a common means of connecting various computational devices together when they are not physically close to each other. Therefore, it would have been obvious to combine Chang with Sugiyama in view of Ishikawa to obtain the invention as specified in claim 5.

5. Claims 7-8, 15, 23, 33-34 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Hymel (US Patent Application Publication 2003/0220988 A1).

Regarding claims 7 and 33: Sugiyama in view of Ishikawa does not disclose expressly that the interface (input source) comprises a removable media storage reader.

Hymel discloses providing video signal data at an interface using a removable storage reader (para. 10, lines 14-15 and lines 20-21 of Hymel – *DVD is a removable data storage storing video signals and outputting the video signals through an interface*).

Sugiyama in view of Ishikawa is analogous art with respect to Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a DVD drive at the interface (input source). The suggestion for doing so would have been that DVDs are a common form of video data media. Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 7 and 33.

Regarding claims 8 and 34: Sugiyama in view of Ishikawa does not disclose expressly that the interface (input source) comprises a media input device selected from a group consisting of: a DVD reader, a video cassette tape reader, a CD reader, an audio cassette tape reader, and a flash card reader.

Hymel discloses an interface comprising a media input device (para. 10, lines 1-5 of Hymel) selected from a group consisting of: a DVD reader (para. 10, lines 14-15 and lines 20-21 of Hymel), a video cassette tape reader (para. 10, lines 14-15 and line 20 of Hymel – *digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape*), a CD reader (para. 10, lines 14-15 and

lines 19-20 of Hymel), an audio cassette tape reader (para. 10, lines 14-15 and line 19 of Hymel – *audio cassette tape reader is a type of audio player, MP3 player is merely an example*), and a flash card reader (para. 10, lines 14-15 and lines 19-20 of Hymel – *MP3 players and digital cameras generally use flash card memory*).

Sugiyama in view of Ishikawa is analogous art with respect to Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the media input device at the interface be a DVD reader, a video cassette tape reader, a CD reader, an audio cassette tape reader, and/or a flash card reader, as taught by Hymel. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 8 and 34.

Regarding claims 15 and 41: Sugiyama in view of Ishikawa does not disclose expressly that the interface (input source) comprises an embedded audio recorder, wherein the external source of media is a series of sounds that are converted into an electrical format by the embedded audio recorder and then provided to the media processing system.

Hymel discloses an embedded (para. 10, lines 22-26 of Hymel) audio recorder (para. 10, lines 14-15 and line 19 of Hymel). As is abundantly well-known in the art, an embedded audio recorder input into a computerized media processing system inputs, as an external source of media, a series of sounds that are converted into an electrical format by the embedded audio recorder and then provided to the media processing system.

Sugiyama in view of Ishikawa is analogous art with respect to Hymel because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an embedded audio recorder as part of the interface. The motivation for doing so would have been to allow a user to connect another one of a variety of different types of peripheral devices, thus allowing the user to perform one more of a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 15 and 41.

Regarding claims 23 and 49: Sugiyama in view of Ishikawa does not disclose expressly that the electronic output system (second output source) comprises an embedded web page display.

Hymel discloses an embedded web page display (figure 1(130) and para. 11, lines 1-10 of Hymel).

Sugiyama in view of Ishikawa is analogous art with respect to Hymel because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include an embedded web page display as part of the electronic output system (second output source). The motivation for doing so would have been to allow a user to display a web page, which is simply one of a plurality of different types of desirable output (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 23 and 49.

6. Claims 9, 25-26 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Stevens (US Patent Application Publication 2002/0010641 A1).

Regarding claims 9 and 35: Sugiyama in view of Ishikawa does not disclose expressly that the external source (input source) is a media broadcaster, and wherein the interface comprises a media broadcast receiver that can be tuned to a media broadcast.

Stevens discloses an external source (input source) that is a media broadcaster, wherein the interface comprises a media broadcast receiver that can be tuned to a media broadcast (figure 3(110) and para. 36, lines 1-8 of Stevens).

Sugiyama in view of Ishikawa is analogous art with respect to Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the interface taught by Sugiyama to receive a media broadcast from a media broadcast receiver (radio), as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 9 and 35.

Regarding claims 25 and 26: Sugiyama in view of Ishikawa does not disclose expressly that said multimedia processing system comprises an embedded audio encryption module and an embedded video encryption module.

Stevens discloses an embedded audio encryption module (para. 54, lines 1-4 and para. 57, lines 3-4 of Stevens) and an embedded video encryption module (para. 54, lines 1-4 of Stevens).

Sugiyama in view of Ishikawa is analogous art with respect to Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded audio encryption module and the embedded video encryption module taught by Stevens as part of said multimedia processing system. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 25 and 26.

7. Claims 10 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226), Stevens (US Patent Application Publication 2002/0010641 A1), Hymel (US Patent Application Publication 2003/0220988 A1), and McCarthy (US Patent 6,296,693 B1).

Regarding claims 10 and 36: Sugiyama in view of Ishikawa does not disclose expressly that the interface (input source) comprises an embedded receiver selected from a group consisting of: an embedded TV receiver, an embedded radio receiver, an embedded short-wave radio receiver, an embedded satellite radio receiver, an embedded two-way radio, and an embedded cellular phone.

Stevens discloses an embedded TV receiver (figure 3(110) and para. 36, lines 1-8 of Stevens), an embedded radio receiver (para. 36, lines 1-8 of Stevens), and an embedded satellite radio receiver (para. 36, lines 1-8 of Stevens) available for selection by a user (para. 36, lines 6-10 of Stevens).

Sugiyama in view of Ishikawa is analogous art with respect to Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have an embedded TV receiver, an embedded radio receiver, and an embedded satellite radio receiver available for selection at the interface (input source), as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Ishikawa.

Sugiyama in view of Ishikawa and Stevens does not disclose expressly that said group consists of not only an embedded TV receiver, an embedded radio receiver, and an embedded satellite radio receiver, but also an embedded short-wave radio receiver, an embedded two-way radio, and an embedded cellular phone.

Hymel discloses a cellular phone as an input device (para. 10, lines 14-15 of Hymel).

Sugiyama in view of Ishikawa and Stevens is analogous art with respect to Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the cellular phone taught by Hymel embedded and selectable, as taught by Stevens. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Ishikawa and Stevens.

Sugiyama in view of Ishikawa, Stevens and Hymel does not disclose expressly that said group consists of not only an embedded TV receiver, an embedded radio receiver, an embedded satellite radio receiver, and an embedded cellular phone, but also an embedded short-wave radio receiver, and an embedded two-way radio.

McCarthy discloses including a two-way (CB) radio (column 7, lines 13-16 and lines 21-23 of McCarthy) and a radio receiver for receiving short wave radio signals (column 7, lines 13-16 and lines 21-23 of McCarthy).

Sugiyama in view of Ishikawa, Stevens and Hymel is combinable with McCarthy because they are from similar problem solving areas, namely the control of data communication hardware. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the two-way radio and the short-wave radio taught by McCarthy in the group of selectable embedded receivers. The motivation for doing so would have been to provide the user with means of personal communication. Therefore, it would have been obvious to combine McCarthy with Sugiyama in view of Ishikawa, Stevens and Hymel to obtain the invention as specified in claims 10 and 36.

8. Claims 11 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226), Federspiel (US Patent 5,170,935), Baron (US Patent 5,940,776), and McCarthy (US Patent 6,296,693 B1).

Regarding claims 11 and 37: Sugiyama in view of Ishikawa does not disclose expressly that the interface (input source) comprises an embedded receiver selected from a group consisting of an embedded heat sensor, an embedded humidity sensor, an embedded National Weather Service radio alert receiver, and an embedded TV Emergency Broadcast System (EBS) alert monitor.

Federspiel discloses selecting between an embedded heat sensor (column 12, lines 10-18 of Federspiel) and an embedded humidity sensor (column 12, lines 21-24 of Federspiel).

Sugiyama in view of Ishikawa is analogous art with respect to Federspiel because they are from similar problem solving areas, namely the control and processing of digital time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to select from among an embedded heat sensor and an embedded humidity sensor, as taught by Federspiel. The motivation for doing so would have been to be able to control the environmental conditions in which a user is present (column 2, lines 5-9 of Federspiel). Therefore, it would have been obvious to combine Federspiel with Sugiyama in view of Ishikawa.

Sugiyama in view of Ishikawa and Federspiel does not disclose expressly that said group consists not only of an embedded heat sensor and an embedded humidity sensor, but also of an embedded National Weather Service radio alert receiver, and an embedded TV Emergency Broadcast System (EBS) alert monitor.

Baron discloses an embedded National Weather Service radio alert receiver (column 5, lines 45-49 and lines 61-65 of Baron).

Sugiyama in view of Ishikawa and Federspiel is analogous art with respect to Baron because they are from similar problem solving areas, namely the control and processing of digital time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded National Weather Service radio alert receiver taught by Baron in the group of receivers from which a user can select. The motivation for doing so would have been so that a user can stay informed about the latest weather conditions and possible weather emergencies (column 1, lines 23-31 of Baron). Therefore, it would have been obvious to combine Baron with Sugiyama in view of Ishikawa and Federspiel.

Sugiyama in view of Ishikawa, Federspiel and Baron does not disclose expressly that said group consists not only of an embedded heat sensor, an embedded humidity sensor, and an embedded National Weather Service radio alert receiver, but also of an embedded TV Emergency Broadcast System (EAS) alert monitor.

McCarthy discloses an embedded TV Emergency Broadcast System (EBS) alert monitor (column 7, lines 13-16 and lines 18-21 of McCarthy).

Sugiyama in view of Ishikawa, Federspiel and Baron is analogous art with respect to McCarthy because they are from similar problem solving areas, namely the control and processing of digital time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded TV Emergency Broadcast System (EBS) alert monitor taught by McCarthy in the group of receivers from which a user can select. The motivation for doing so would have been to

keep the user alerted to any emergency conditions (column 7, lines 15-18 of McCarthy). Therefore, it would have been obvious to combine McCarthy with Sugiyama in view of Ishikawa, Federspiel and Baron to obtain the invention as specified in claims 11 and 37.

9. Claims 13, 27-28 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Chino (US Patent 6,118,888).

Regarding claims 13 and 39: Sugiyama in view of Ishikawa does not disclose expressly that the interface (input source) comprises an ultrasonic pen capture device.

Chino discloses an ultrasonic pen capture device (figure 3(102i) and column 7, lines 14-16 of Chino).

Sugiyama in view of Ishikawa is analogous art with respect to Chino because they are from the same field of endeavor, namely the control and processing of digital data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to capture input data using an ultrasonic pen capture device, as taught by Chino. The suggestion for doing so would have been that an electronic pen is simply another useful output device that provides digital data a user may wish to obtain (figure 3 and column 6, lines 66-67 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 13 and 39.

Regarding claim 27: Sugiyama in view of Ishikawa does not disclose expressly that the multimedia processing system comprises an embedded audio sound localization module.

Chino discloses an embedded audio sound localization module (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound localization is determined.

Sugiyama in view of Ishikawa is analogous art with respect to Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded audio sound localization module taught by Chino as part of the overall multimedia processing system. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Ishikawa to obtain the invention as specified in claim 27.

Regarding claim 28: Sugiyama in view of Ishikawa does not disclose expressly that said multimedia processing system comprises an embedded video motion detection module.

Chino discloses an embedded video motion detection module (figure 3(102f) and column 7, lines 33-38 of Chino).

Sugiyama in view of Ishikawa is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the embedded video motion detection module taught by Chino as part of the overall multimedia processing system. The suggestion for doing so would have been that detection of a user's motion and gestures is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Ishikawa to obtain the invention as specified in claim 28.

10. Claims 16, 21-22, 24, 42 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Korman (US Patent 6,308,887 B1).

Regarding claims 16 and 42: Sugiyama in view of Ishikawa does not disclose expressly that the electronic output system (second output source) is configured to write said electronic representation to a removable media storage device.

Korman discloses outputting digital multimedia data to a removable media storage device (column 7, lines 31-35 and column 10, lines 28-31 of Korman).

Sugiyama in view of Ishikawa is analogous art with respect to Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to write said electronic representation to the removable media storage device taught by Korman. The motivation for doing so would have been to provide a convenient, transportable computer medium for the digital data comprising said electronic representation (column 7, lines 33-35 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 16 and 42.

Regarding claims 21 and 47: Sugiyama in view of Ishikawa does not disclose expressly that the electronic output system (second output source) is coupled to a speaker system and sends an audio signal to the speaker system.

Korman discloses outputting audio data using a speaker system as a peripheral device (figure 2 (310) and column 7, lines 47-54 of Korman). In order for said speaker system to operate as an output, sending an audio signal to said speaker system is inherent.

Sugiyama in view of Ishikawa is analogous art with respect to Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to output audio data to a connected speaker system, as taught by Korman. The motivation for doing so would have been to provide the appropriate output format if audio output is desired. Therefore, it would have been obvious to combine Korman with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 21 and 47.

Further regarding claims 22 and 48: Korman discloses that the electronic output system comprises an embedded sound player for generating the audio signal (column 5, lines 30-34 of Korman).

Regarding claim 24: Sugiyama in view of Ishikawa does not disclose expressly that the media processing system comprises an embedded multimedia server.

Korman discloses an embedded multimedia server (figure 2(10) and column 3, lines 48-56 of Korman).

Sugiyama in view of Ishikawa is analogous art with respect to Korman because they are from the same field of endeavor, namely the control and processing of multi-media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a multi-media server in the overall media processing system, as taught by Korman. The motivation for doing so would have been to provide control and communication relay for the multi-media processing devices comprising the media processing system (column 3, lines 49-52 of Korman). Therefore, it would have been obvious to combine Korman with Sugiyama in view of Ishikawa to obtain the invention as specified in claim 24.

11. Claims 17 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226), Korman (US Patent 6,308,887 B1), Hymel (US Patent Application Publication 2003/0220988 A1), Kleinrock (US Patent 5,936,542), and Gerber (US Patent 5,568,406).

Regarding claims 17 and 43: Sugiyama in view of Ishikawa and Korman does not disclose expressly that the removable storage device is selected from a group consisting of a DVD, a video

cassette tape, a CD, an audio cassette tape, a flash card, a computer disk, an SD disk, and a computer-readable medium.

Hymel discloses a removable storage device selected from among a DVD (para. 10, lines 14-15 and lines 20-21 of Hymel), a video cassette tape (digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), a CD (para. 10, lines 14-15 and lines 19-20 of Hymel), and an audio cassette tape (audio cassette tape reader is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), a computer disk (para. 19, lines 8-9 of Hymel), and a computer-readable medium (para. 19, lines 8-9 of Hymel).

Sugiyama in view of Ishikawa and Korman is analogous art with respect to Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a DVD, a video cassette tape, a CD, an audio cassette tape, a computer disk, and a computer-readable medium. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Ishikawa and Korman.

Sugiyama in view of Ishikawa, Korman and Hymel does not disclose expressly that the group consists not only of a DVD, a video cassette tape, a CD, an audio cassette tape, a computer disk, and a computer-readable medium, but also a flash card and an SD disk.

Kleinrock discloses storing digital data on a flash card (column 7, lines 34-35 of Kleinrock).

Sugiyama in view of Ishikawa, Korman and Hymel is analogous art with respect to Kleinrock because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection a flash card. The suggestion for doing so would have been that a flash card is simply another of many possible storage devices from which to choose (column 7, lines 34-36 of Kleinrock). Therefore, it would have been obvious to combine Kleinrock with Sugiyama in view of Ishikawa, Korman and Hymel.

Sugiyama in view of Ishikawa, Korman, Hymel and Kleinrock does not disclose expressly that the group consists not only of a DVD, a video cassette tape, a CD, an audio cassette tape, a computer disk, a computer-readable medium, and a flash card, but also an SD disk.

Gerber discloses storing digital data on an SD disk (column 10, lines 28-34 of Gerber).

Sugiyama in view of Ishikawa, Korman, Hymel and Kleinrock is combinable with Gerber because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have available for selection an SD disk. The motivation for doing so would have been that an SD disk is useful for backing up large amounts of digital data (column 10, lines 23-34 of Gerber). Therefore, it would have been obvious to combine Gerber with Sugiyama in view of Ishikawa, Korman, Hymel and Kleinrock to obtain the invention as specified in claims 17 and 43.

12. Claims 18 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Kimura (US Patent 5,270,989).

Regarding claims 18 and 44: Sugiyama in view of Ishikawa does not disclose expressly that the electronic output system (second output source) comprises a handling mechanism to accommodate a plurality of removable storage devices.

Kimura discloses a handling mechanism (figure 1(6) of Kimura) that accommodates a plurality of removable storage devices (column 4, lines 46-52 of Kimura).

Sugiyama in view of Ishikawa is analogous art with respect to Kimura because they are from similar problem solving areas, namely processing and storing digital output data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide a handling mechanism to handle a plurality of removable storage devices, as taught by Kimura. The motivation for doing so would have been to be able to store and select from among a plurality of different available removable storage devices (column 2, lines 38-42 of Kimura). Therefore, it would have been obvious to combine Kimura with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 18 and 44.

13. Claims 19 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226), Kimura (US Patent 5,270,989), Takemasa (US Patent 5,136,563), and Morinaga (US Patent 4,734,898).

Regarding claims 19 and 45: The arguments regarding claims 18 and 44 are incorporated herein. Kimura further discloses selecting between handling devices (such as Laser Disc or CD) (column 5, lines 23-30 of Kimura). Both handling devices are of the tray type (column 5, lines 20-27 of Kimura).

Sugiyama in view of Ishikawa and Kimura does not disclose expressly that the group of handling mechanism from which the handling mechanism is selected consists not only of a tray, but also of a feeder and a bandolier.

Takemasa discloses a feeder type handling mechanism (figure 2b; figure 18; and column 5, lines 52-67 of Takemasa).

Sugiyama in view of Ishikawa and Kimura is analogous art with respect to Takemasa because they are from similar problem solving areas, namely processing and storing digital output data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the feeder type handling mechanism taught by Takemasa as another type of handling mechanism from which to choose. The motivation for doing so would have been to provide for compact and reliable insertion and switching of the removable storage devices (column 2, lines 14-16 of Takemasa). Therefore, it would have been obvious to combine Takemasa with Sugiyama in view of Ishikawa and Kimura.

Sugiyama in view of Ishikawa, Kimura and Takemasa does not disclose expressly that said group of handling mechanism from which the handling mechanism is selected consists not only of a feeder and a tray, but also of a bandolier.

Morinaga discloses a bandolier type handling mechanism (figure 3a and column 4, lines 53-62 of Morinaga).

Sugiyama in view of Ishikawa, Kimura and Takemasa is analogous art with respect to Morinaga because they are from similar problem solving areas, namely processing and storing digital output data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the bandolier type handling mechanism taught by Morinaga as another type of handling mechanism from which to choose. The motivation for doing so would have been to be able to store even more removable storage devices that with the tray or feeder type handling mechanisms while preventing damage to the removable storage devices (column 2, lines 14-24 of Morinaga). Therefore, it would have been obvious to combine Morinaga with Sugiyama in view of Ishikawa, Kimura and Takemasa to obtain the invention as specified in claims 19 and 45.

14. Claims 20 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US Patent 5,633,723) in view of Ishikawa (US Patent 5,987,226) and Steinberg (US Patent 6,000,030).

Regarding claims 20 and 46: Sugiyama in view of Ishikawa does not disclose expressly that said electronic output system (second output source) comprises a media writer selected from a group consisting of a disposable media writer and a self-destructing media writer.

Steinberg discloses a disposable media writer (column 4, lines 16-20 of Steinberg) and a self-destructing media writer (column 5, lines 28-36 of Steinberg).

Sugiyama in view of Ishikawa is analogous art with respect to Steinberg because they are from similar problem solving areas, namely the control and storage of digital data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide for digital data output a group of media writers consisting of a disposable media writer and a self-destructing media writer, as taught by Steinberg. The motivation for doing so would have been prevent unauthorized access to computer files (column 1, lines 43-50 of Steinberg). Therefore, it would have been obvious to combine Steinberg with Sugiyama in view of Ishikawa to obtain the invention as specified in claims 20 and 46.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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James A. Thompson
Examiner
Technology Division 2625